RTIP ID# *(required)* ORA000809
TCWG Consideration Date November 30, 2010
Project Description *(clearly describe project)* The City of Fullerton (City) proposes to construct a grade separation (underpass) at the intersection of Raymond Avenue and the Burlington Northern Santa Fe (BNSF) mainline rail crossing. The grade separation would extend from Santa Fe Avenue at the northern end to south of Ash Avenue on Raymond Avenue. Raymond Avenue would be lowered as an underpass. Walnut Avenue and Ash Avenue would be lowered to intersect Raymond Avenue at the new depressed grade. The proposed project would maintain the existing roadway configuration that consists of a conventional four-lane divided primary arterial highway, although Raymond Avenue would be shifted 10 feet to the west to minimize impacts to businesses on the east side of Raymond Avenue due to their proximity to the roadway. The retaining walls associated with the lowering of the roadway would block access to some properties in the vicinity of the railroad tracks. New connector roads would be provided to Valencia Drive, Truslow Avenue, and Ash Avenue. In addition, the driveway on Raymond Avenue to APN 033-221-10 would be permanently closed. The remaining driveway to this property on Walnut Avenue would remain open. The proposed project would eliminate the existing railroad-crossing signal since the road would be beneath the tracks. A new traffic signal would be provided at the Ash Avenue/Raymond Avenue/Valencia Drive Connector. The proposed signal system would also be interconnected and coordinated.
Type of Project *(use Table 1 on instruction sheet)* Railroad grade separation with intersection signalization

County Orange	**Narrative Location/Route & Postmiles:** Raymond Avenue at the BNSF rail crossing **Caltrans Projects**

Lead Agency: City of Fullerton

Contact Person Thuy Nguyen	**Phone#** (714) 738-6886	**Fax#** (714) 738-3115	**Email** ThuyN@ci.fullerton.ca.us

Hot Spot Pollutant of Concern *(check one or both)*   **PM2.5 x**   **PM10 x**
Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

Categorical Exclusion (NEPA)	X	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**

Scheduled Date of Federal Action: June 2011
NEPA Delegation – Project Type *(check appropriate box)*

Exempt		**Section 6004 – Categorical Exclusion**	X	**Section 6005 – Non Categorical Exclusion**

Current Programming Dates *(as appropriate)*				
	PE/Environmental	**ENG**	**ROW**	**CON**
Start	2009	2011	2011	2013
End	2011	2012	2012	2016

Project Purpose and Need (Summary): *(attach additional sheets as necessary)*
Raymond Avenue is a primary arterial highway that provides north-south traffic movements through the City of Fullerton. Raymond Avenue currently carries 18,600 vehicles per day, with over 21,000 vehicles projected in 2030. The BNSF crossing has approximately 82 trains per day causing vehicle delays. Projected future increases in train and vehicular volumes escalate the potential for future traffic incidents caused by the presence of the at-grade railroad crossing. The purpose of the project is to eliminate an at-grade railroad crossing on Raymond Avenue and to meet the goals and objectives of the Southern California Trade Corridor Program and of the California Public Utilities Commission established priority list for the grade separation program. The project is needed to increase future safety and reduce vehicle delay.

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
Commercial, residential, and light industrial developments account for the majority of the land uses within the vicinity of the Raymond Avenue railroad crossing.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
2013 – Raymond Avenue

No Build: ADT = 16,128, Truck ADT = 1,290, LOS = B to C

Build: ADT = 16,128, Truck ADT = 1,290, LOS = A to C

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
2035– Raymond Avenue

No Build: ADT = 17,479, Truck ADT = 1,398, LOS = B to C

Build: ADT = 17,479, Truck ADT = 1,398, LOS = A to C

Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

N/A

RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT

N/A

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
See attached analysis

Comments/Explanation/Details *(attach additional sheets as necessary)*
See attached analysis

PM$_{2.5}$/PM$_{10}$ Hot-Spot Analysis

The proposed project is located within a nonattainment area for federal PM$_{2.5}$ and PM$_{10}$ standards. Therefore, per 40 CFR Part 93 hot-spot analyses are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) because of the following reasons:

i.   The proposed project is not a new or expanded highway project. The proposed project is a grade separation project that includes the signalization of one existing intersection. This type of project improves traffic operations by reducing congestion. Based on the *Traffic Analysis* (LSA Associates, Inc., October 2010), the proposed project would not increase the traffic volumes along Raymond Avenue or any other local roadways. The traffic volumes along Raymond Avenue would not exceed the 125,000 average daily trips threshold for a POAQC. In addition, as the project serves a commercial/residential area, the truck traffic percentage would not exceed the eight percent threshold for POAQC. The future traffic volumes along Raymond Avenue are shown in Table 1.

Table 1 Traffic Volumes

Roadway Link	2013			2035		
	Total ADT	Truck ADT	Project Change	Total ADT	Truck ADT	Project Change
Raymond Ave. (between Chapman Ave. and Commonwealth Ave.)	14,331	1,146	0/0	15,531	1,242	0/0
Raymond Ave. (between Commonwealth Ave. and Orangethorpe Ave.)	16,128	1,290	0/0	17,479	1,398	0/0
Raymond Ave. (between Orangethorpe Ave. and SR-91 eastbound ramps)	26,402	2,112	0/0	28,613	2,289	0/0

Source: LSA Associates, Inc., October 2010.

ii. The proposed project does not affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles. Based on the *Traffic Analysis*, the proposed project would reduce the delay and improve the LOS at intersections within the project vicinity. The LOS conditions in the project vicinity with and without the proposed project are shown in Tables 2, 3, 4, and 5.

iii. The proposed project does not include the construction of a new bus or rail terminal.

iv. The proposed project does not expand an existing bus or rail terminal.

v.   The proposed project is not in or affecting locations, areas, or categories of sites that are identified in the PM$_{2.5}$ and PM$_{10}$ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM$_{10}$ or PM$_{2.5}$ violation.

Table 2: 2013 Without Project Intersection Levels of Service

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS
1. Raymond Avenue/Chapman Avenue	33.0	C	33.0	C
2. Raymond Avenue/Commonwealth Avenue	19.0	B	26.0	C
3. Raymond Avenue/East Walnut Avenue[1]	17.3	C	19.8	C
4. Raymond Avenue/Valencia Drive[1]	18.8	C	13.4	B
5. Raymond Avenue/Ash Avenue[1]	14.3	B	16.0	C
6. Raymond Avenue/Kimberly Avenue[1]	23.5	C	**40.8**	**E**
7. Raymond Avenue/Orangethorpe Avenue	21.0	C	27.0	C
8. Raymond Avenue/SR-91 westbound ramps	13.0	B	21.0	C
9. Raymond Avenue/SR-91 eastbound ramps	24.0	C	23.0	C

Note: **Bold** = exceeds LOS standard

[1] Unsignalized intersection

Table 3: 2035 Without Project Intersection Levels of Service

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS
1. Raymond Avenue/Chapman Avenue	40.0	D	34.0	C
2. Raymond Avenue/Commonwealth Avenue	20.0	B	28.0	C
3. Raymond Avenue/East Walnut Avenue[1]	18.4	C	21.6	C
4. Raymond Avenue/Valencia Drive[1]	20.3	C	13.8	B
5. Raymond Avenue/Ash Avenue[1]	14.9	B	17.0	C
6. Raymond Avenue/Kimberly Avenue[1]	26.1	D	**50.9**	**F**
7. Raymond Avenue/Orangethorpe Avenue	22.0	C	28.0	C
8. Raymond Avenue/SR-91 westbound ramps	14.0	B	25.0	C
9. Raymond Avenue/SR-91 eastbound ramps	27.0	C	25.0	C

Note: **Bold** = exceeds LOS standard

[1] Unsignalized intersection

Table 4: 2013 With Project Intersection Levels of Service

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS
1. Raymond Avenue/Chapman Avenue	33.0	C	33.0	C
2. Raymond Avenue/Commonwealth Avenue	19.0	B	26.0	C
3. Raymond Avenue/East Walnut Avenue[1]	7.0	A	11.0	B
4. Raymond Avenue/Valencia Connector-Ash Avenue[2]	11.0	B	12.0	B
5. Raymond Avenue/Ash Avenue[1]	14.3	B	16.0	C
6. Raymond Avenue/Kimberly Avenue[1]	23.5	C	**40.8**	**E**
7. Raymond Avenue/Orangethorpe Avenue	21.0	C	27.0	C
8. Raymond Avenue/SR-91 westbound ramps	13.0	B	21.0	C
9. Raymond Avenue/SR-91 eastbound ramps	24.0	C	23.0	C

Note: **Bold** = exceeds LOS standard

[1] Unsignalized intersection

[2] New 4-way signalized intersection

Table 5: 2035 With Project Intersection Levels of Service

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (sec)	LOS	Delay (sec)	LOS
1. Raymond Avenue/Chapman Avenue	40.0	D	34.0	C
2. Raymond Avenue/Commonwealth Avenue	20.0	B	28.0	C
3. Raymond Avenue/East Walnut Avenue[1]	7.0	A	11.0	B
4. Raymond Avenue/Valencia Connector-Ash Avenue[2]	12.0	B	12.0	B
5. Raymond Avenue/Ash Avenue[1]	14.9	B	17.0	C
6. Raymond Avenue/Kimberly Avenue[1]	26.1	D	**50.9**	**F**
7. Raymond Avenue/Orangethorpe Avenue	22.0	C	28.0	C
8. Raymond Avenue/SR-91 westbound ramps	14.0	B	25.0	C
9. Raymond Avenue/SR-91 eastbound ramps	27.0	C	25.0	C

Note: **Bold** = exceeds LOS standard

[1] Unsignalized intersection

[2] New 4-way signalized intersection